

Fig. 1 Scheme of the random assembling of polyepitope genes with
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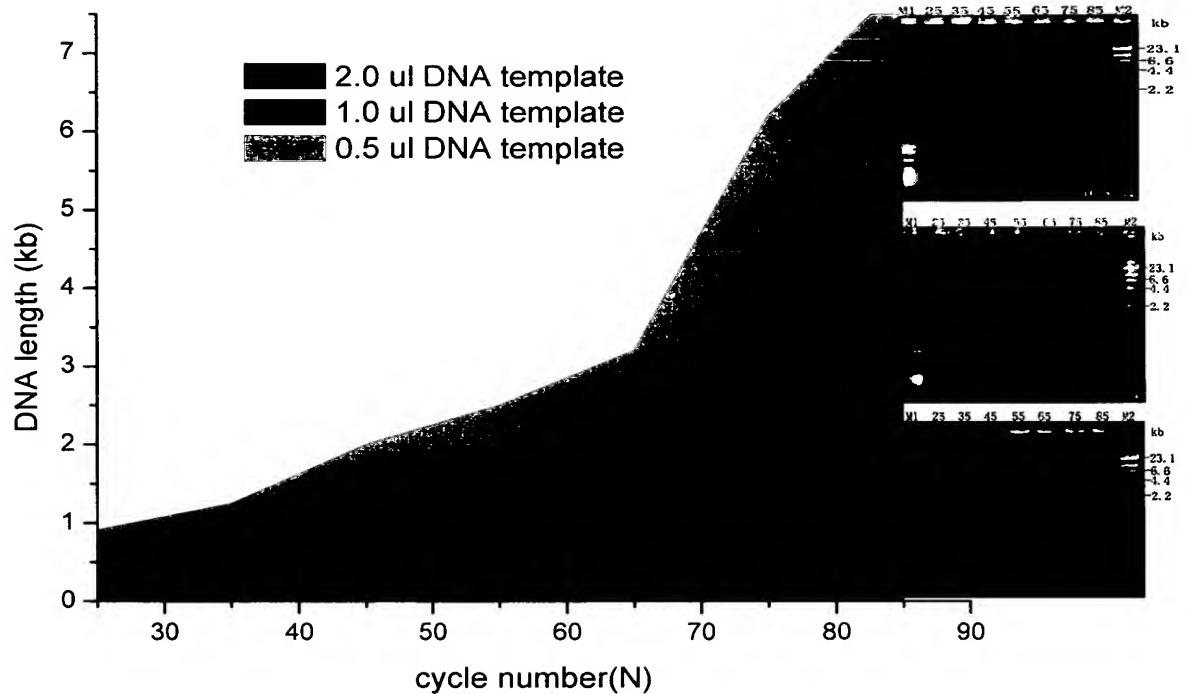


Fig. 2 Graph of polyepitope genes randomly constructed by using a primer-free polymerase chain reaction under different conditions

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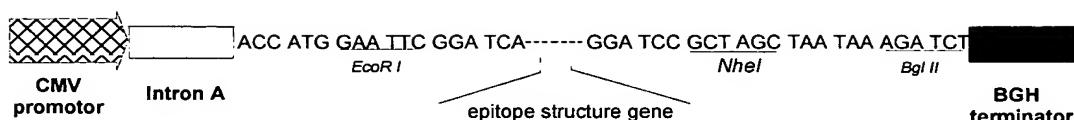


Fig. 3 Gene structure of a polyepitope gene vaccine in an eukaryotic expression vector

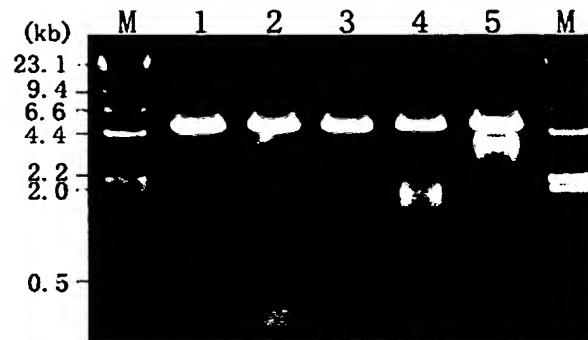
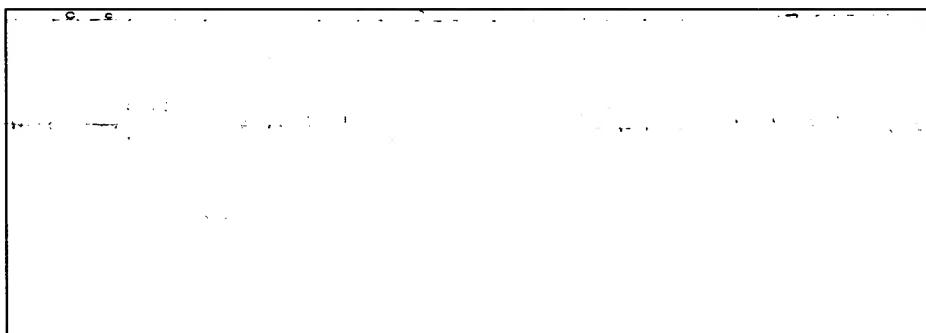


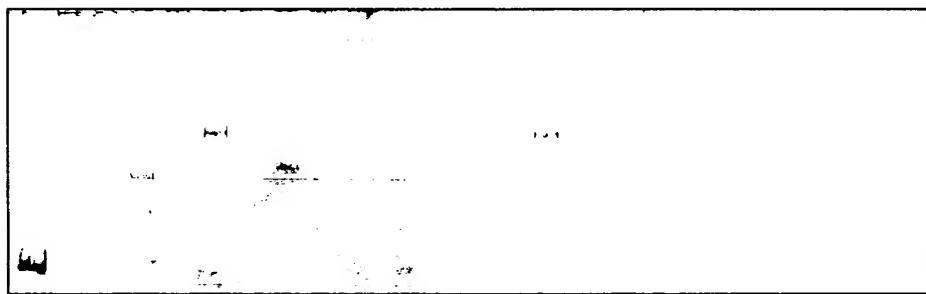
Figure 4 Gene lengths in different polyepitope chimeric gene libraries

Title: A METHOD FOR PREPARING POLYPEPTIDE
CHIMERIC GENE VACCINE
Applicant: Wang et al.
Atty Docket: 15475

A



B



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Figure 5 PCR-SSCP assay for the gene diversity of polyepitope chimeric
gene libraries with different lengths

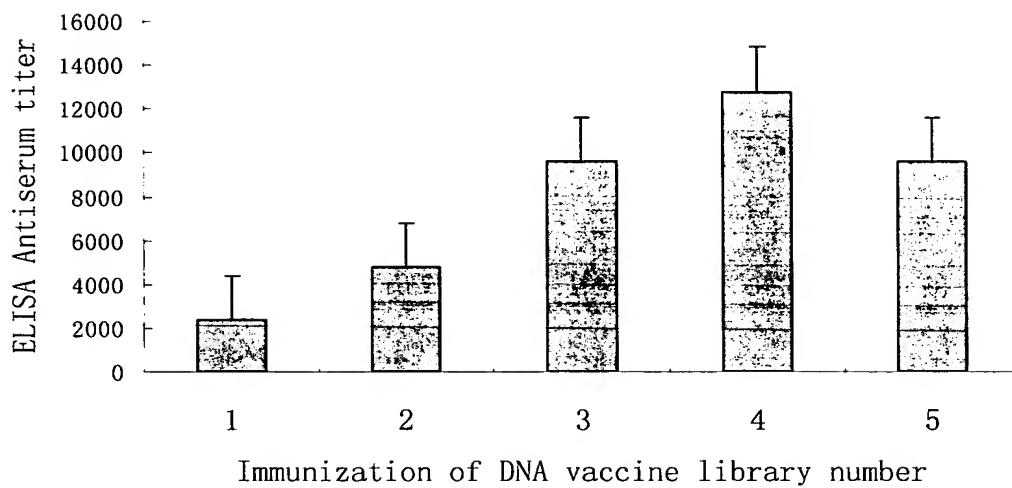


Figure 6 Antibody levels generated by the epitope gene libraries with different lengths

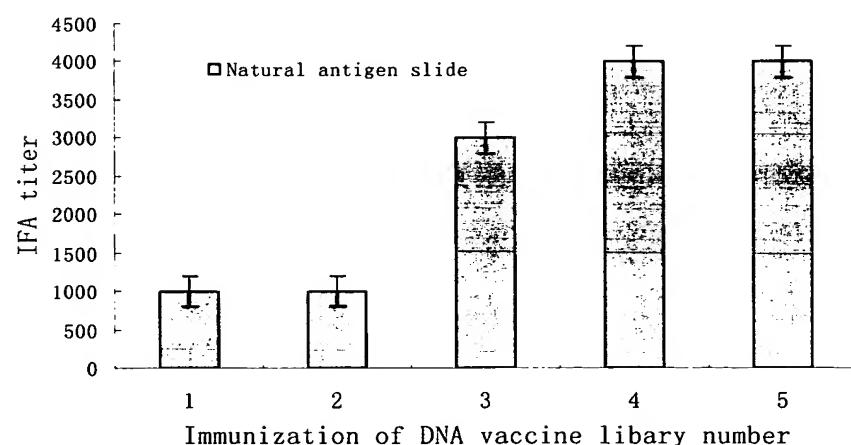


Figure 7 Recognition of native parasite antigens by dilutions of the antibodies generated by polyepitope gene libraries with different lengths

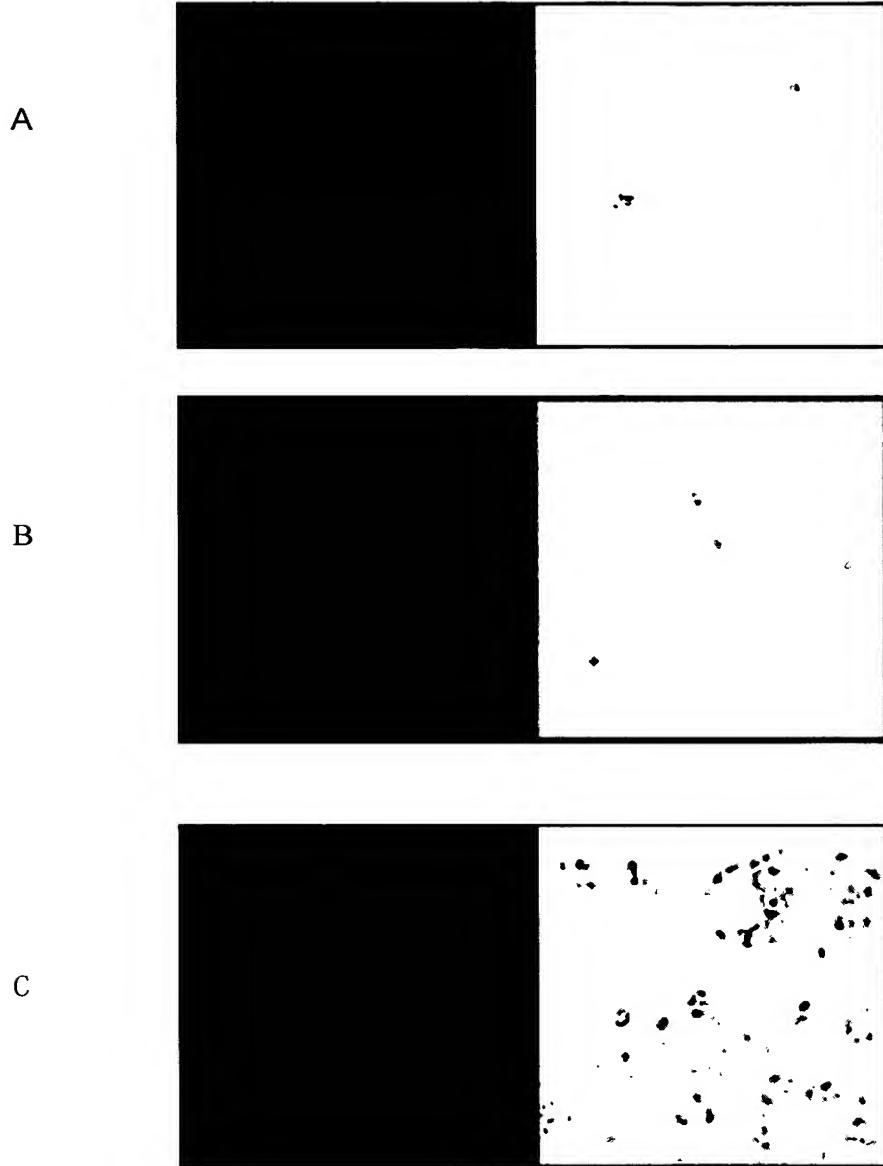


Figure 8 Confocal microscopy results showing the recognition of different native antigens of plasmodium by antibodies generated by polyepitope gene vaccines in No.4 library

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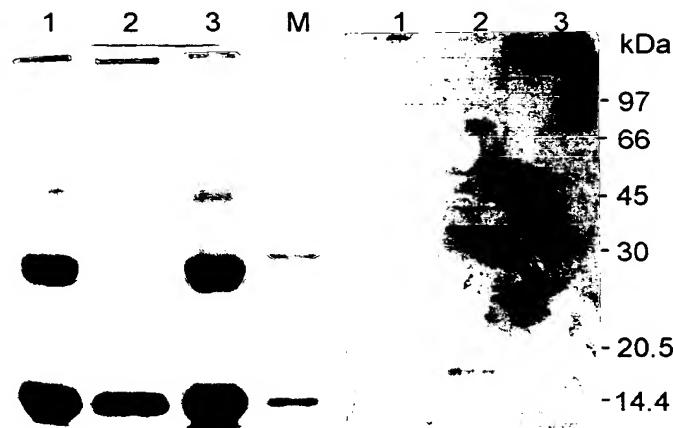


Figure 9 Western blot result demonstrating the recognition of native antigens of plasmodium strain 3D7 by antisera generated by the polyepitope chimeric gene vaccines in No. 3 library (3000 \times diluted)

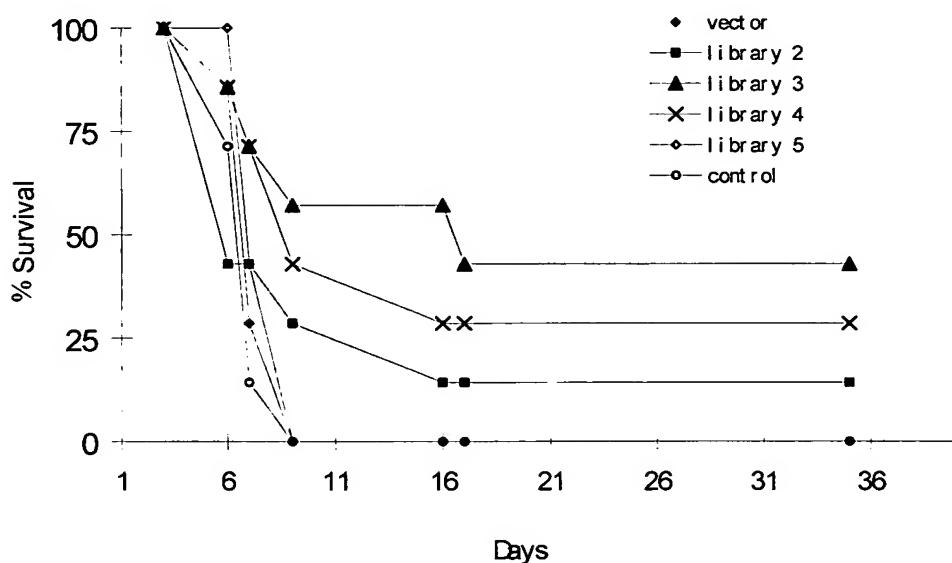


Figure 10 Cross protection by the polyepitope chimeric gene vaccines in different libraries against *Plasmodium yoelii*

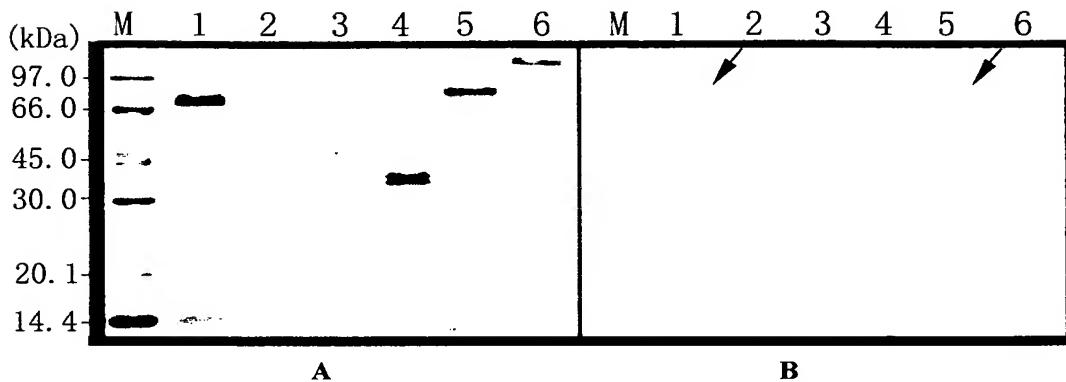


Figure 11 Western blot of the prokaryotic expression of antigen genes with high immunogenicity

A. SDS-PAGE; B. hybridization membrane

1. SP312; 2. vector; 3. SN33; 4. SN34; 5. SP352; 6. SN36.

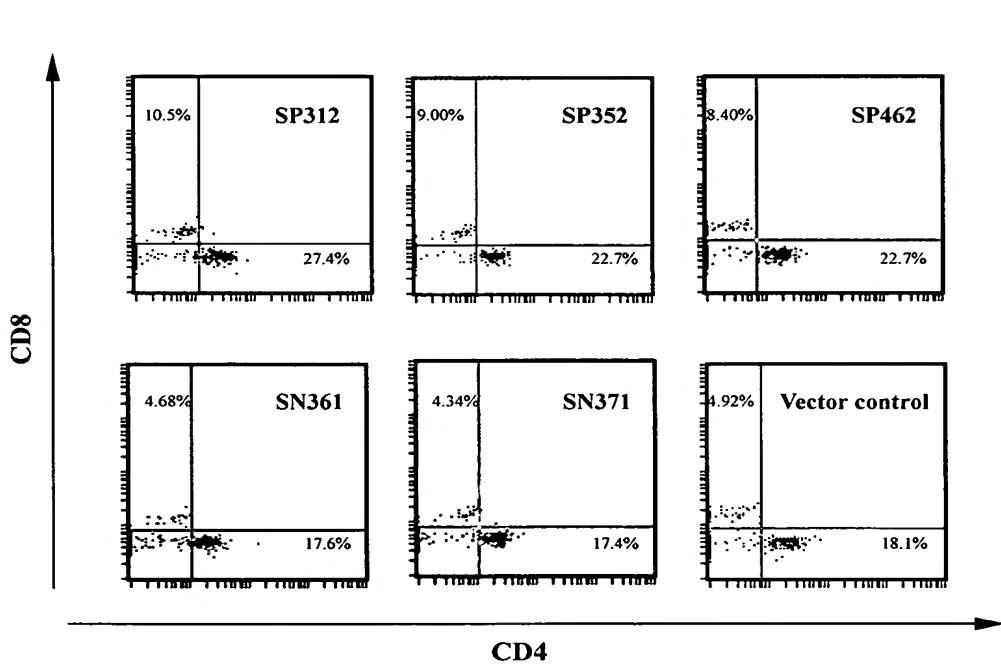


Figure 12 Detection of cytokines involved in in vivo immune response elicited by the positive (SP) and negative (SN) clones screened from the libraries